## **ABSTRACT**

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A laser beam from an LD 11 is irradiated onto a magnetooptic disk 33 by a predetermined power for a heat treatment. After the heat treatment, the laser beam of a power smaller than the power upon heat treatment is irradiated to the heat-treated area. Reflection light of the laser beam of the small power enters photodetectors 24 and 26 and reflection light amounts of a P wave and an S wave are detected, respectively. A differential detecting circuit 27 detects a level of a magnetooptic signal corresponding to the heat-treated area on the basis of the reflection light amounts of the P wave and the S wave. A controller 28 determines whether or not the magnetooptic signal level detected by the differential detecting circuit 28 lies within a permissible range. If it is out of the range, the power of the laser beam to execute the heat treatment is adjusted and the process of a magnetooptic disk is stopped or a message showing such a fact is displayed, or the like.

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